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ABSTRACT

Empathy as a personality variable and as related to social behavior in young children has not been examined for its specificity with regard to various affect classes but has generally been treated as a global response to all affect classes. Three kinds of evidence relative to the specificity of empathic responses are analyzed: (1) correlations between empathic responses to four affect classes (happiness, sadness, anger, and fear); (2) a comparison of the empathic responses of 3- and 4-year-olds to the affect classes and (3) correlations between cooperative social behavior and the empathic sensitivity to the four affect classes. The experience of positive feelings in response to others' happiness appears distinct from the responses to the affective states of anger, fear or sadness, both as it appears developmentally and as it relates to social behavior. (Author/DB)

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The Specificity of Empathic Responses in Young Children

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ABSTRACT

Empathy as a personality variable and as related to social behavior in young children has not been examined for its specificity with regard to various affect classes but has generally been treated as a global response to all affect classes. Three kinds of evidence relative to the specificity of empathic responses are analyzed: (1) correlations between empathic responses to four affect classes (happiness, sadness, anger, and fear); (2) a comparison of the sensitivity to the affect classes for three- and four-year-olds; and (3) correlations between cooperative social behavior and the empathic sensitivity to the four affect classes. The experience of positive feelings in response to others' happiness appears distinct from the responses to the affective states of anger, fear or sadness, both as it appears developmentally and as it relates to social behavior.

Investigation of the origins and course of the development of empathy, and the correlates of empathy within the early childhood years (as here distinguished from middle childhood years), has been based upon two definitions of empathy: empathy as cognitive awareness of others' emotional states (Borke, 1971); and, empathy as both cognitive awareness and vicarious affective response to others' emotional states (Hoffman, 1976; Feshbach & Roe, 1968). Those defining empathy from a cognitive-developmental framework (e.g., Chandler & Greenspan, 1972) have generally looked beyond the early childhood years for what they see as major developmental shifts in the child's understanding of others' points of view or experiences.

The present paper adopts the point of view which recognizes empathy as both cognitive awareness and vicarious affectivity (Feshbach & Roe, 1968). Research has thus far reported correlations between the Feshbach and Roe measure and aggressive behavior in young children (interpreted as a sign of social activity) (Feshbach & Roe, 1968) and with teacher and observer ratings of preschool children's cooperative behavior (Marcus, Telleen, & Roke, 1979). In both studies empathy was hypothesized to exert a facilitating or moderating influence upon social behavior. The precise functioning of such a mediator has received more theoretical than research attention and the theory has been confined largely to the altruism-empathy linkage (Hoffman, 1976; Iannotti, (Reference Note 2).

In order to examine more closely the nature of the relation between empathy and social behavior (both prosocial and antisocial) in the early childhood years, analysis of the empathy variable should be more fine grained.

Specifically, it must be asked whether empathic responses are global in nature or whether they should be regarded as specific to particular affective states. It is not uncommon to find examples of research on other personality dimensions which benefitted from a more fine grained analysis of developmental changes or personality development by shifting from more global to more specific analyses. Sears' specification of 10 areas of children's self-esteem (Sears, 1963; Sears & Sherman, 1964) or the examination of the situational specificity (as well as cross-situational generality) of cheating behavior (Hartshorne & May, 1928; Burton, 1963), may serve as examples. However, empathy, as defined in this paper, has not been examined for its specificity but has been treated as a global response to all affect classes. Study of the nature of it's mediational properties has thus not progressed beyond a seminal level.

The Feshbach & Roe (1968) situational test of empathy requires that children watch a number of slide sequences as they hear narration of stories relating to the slides. Children are asked how they feel following the presentations of two slide sequences depicting feelings of same-sex children experiencing happiness, anger, sadness, and fear. The test, as previously used, yields two scores: a broad score, when the response is in the general response class as the depicted affect (positive or negative); and a narrow score, an exact match with the depicted affect. Research has used the broad scoring as a single global measure of empathy (Feshbach & Roe, 1968; Feshbach & Feshbach, 1969; Levine & Hoffman, 1975; Marcus, Telleen, & Roke, 1979).

The present study examines three kinds of evidence relative to the specificity of empathic responses: (1) correlations between empathic responses to happy, angry, sad, and fearful affects; (2) a comparison of empathic responses to happy, angry, sad, and fearful affects of three- and four-year-old children (a cross-sectional analysis); and, (3) correlations between cooperative social behavior and empathic responses to happy, angry, sad, and fearful affects. An argument for the specificity of empathic responses could be made if intercorrelations between the various empathic responses are low to moderate, if empathic responses to the four affects develop at different rates and if empathic responses to different affects correlate differentially with cooperative behavior.

The Feshbach and Roe (1968) measure was administered to 32 pre-school children (11 girls, 21 boys), ages 37 to 61 months (Mean = 47.5). Inter-rater reliability was determined by having two individuals label children's verbal responses (total = 256) for the two slide sequences as broad or narrow empathy or as a neutral response (neither broad nor narrow). The percentage of agreement between the two scorers was 100% for the broad scoring and 97% for the narrow scoring. Reliability of empathic responses, in the sense of internal consistency, was also calculated by correlating the responses to slide sequence 1 with slide sequence 2 for each affect separately. The Pearson Product-Moment correlation coefficients for the broad scoring were $r = .80$ for happiness, $r = .80$ for anger, $r = .73$ for sadness, and $r = .81$ for fear. The corresponding correlations for narrow scoring ranged from .22 to .88 and were omitted from further analysis at this time.

The children were also observed by two pairs of independent observers who recorded either the presence or absence of cooperative behavior in 10-second time units for a total of 24 minutes per child. The definition of cooperation was taken from Bijou *et. al.* (1969). Percentage of agreement between pairs of observers during the data collection period was 89% (based on 1,872 intervals) and 78% (based on 1,094 intervals) for pairs 1 and 2, respectively.

Within each of the 4 empathy subtests the broad scoring of empathy was subjected to a Chi square test of the difference between 3 and 4 year olds earning at least one broad empathy score. The results are presented in Table 1.

Table 1

A Chi Square Test of Difference between
3- and 4- year Olds on All Empathy Sub-
tests (n=31)^a

Empathy Subtest	χ^2	df	p
Happiness (broad)	3.1	1	<.10
Anger (broad)	4.0	1	<.05
Sadness (broad)	6.3	1	<.025
Fear (broad)	9.8	1	<.005

^aOne child whose age was 5 years 1 month was omitted for purposes of this comparison

The most dramatic increase in empathic sensitivity appeared with responses to fearful affects while a modest change may be seen in the case of happy affects. If the overall number of broad empathic

responses to each affect (both slide sequences) are graphed for 3 and 4 year olds, the result is as pictured in Figure 1 below.

Figure 1

Comparison of Frequencies of Empathic Responses in Three and Four-Year-Old Children (n=31)

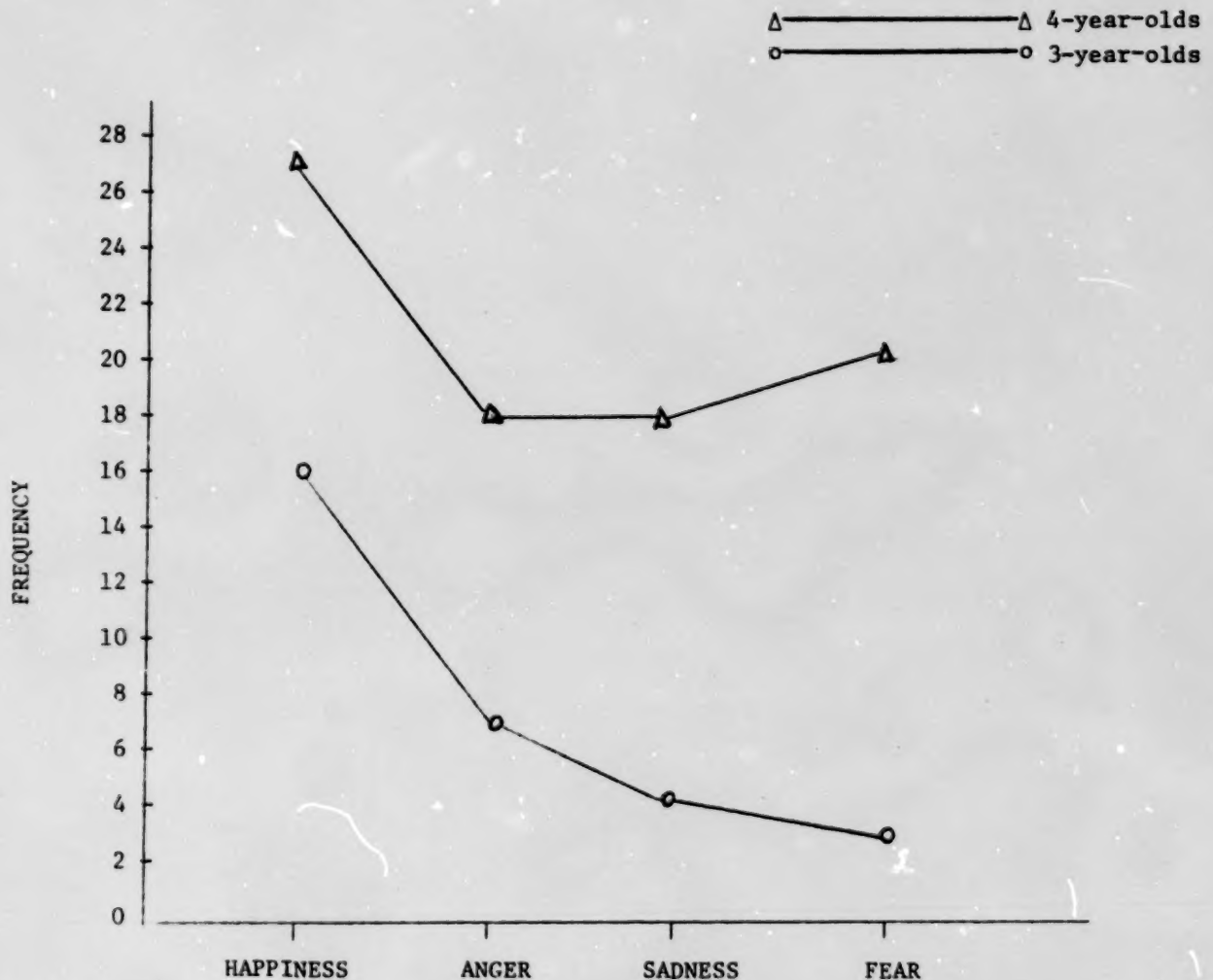


Figure 1 shows that empathic sensitivity to happy feelings is relatively well developed even in 3-year-old children while empathy for the other affect classes lags far behind it.

Table 2

Pearson Product-Moment Correlations Between
Four Classes of Empathic Response (n = 32)

	Happiness	Anger	Sadness	Fear
Happiness	-			
Anger	.17	-		
Sadness	.27	.95**	-	
Fear	.29	.85**	.94**	-

**p <.01

Table 2 clearly shows that empathic responses to anger, sadness, and fear are highly intercorrelated whereas empathic responses to happy feelings require unique abilities.

Pearson correlations between empathic sensitivity to happiness, anger, sadness, and fear and cooperative social behavior are presented in Table 3. Correlations between empathic sensitivities and cooperative behavior with the effects of age and sex partialled out are also presented. With and without partialling controls, empathic sensitivity to happy feelings is significantly related to cooperative social behavior while there is little correlation between cooperative behavior and other empathic responses.

Table 3

Correlations Between Four Classes of Empathic Responses and Cooperative Social Behavior

Class of Empathic Response	Cooperative Social Behavior	
	Zero-Order Correlations	Partial Correlations (age and sex removed)
Happy (Broad)	.34*	.51**
Anger (Broad)	-.07	.05
Sadness (Broad)	-.19	-.09
Fear (Broad)	-.22	-.06

*p < .05 ** p < .01

Finally, since Feshbach and Roe's (1968) measure yields a verbal report of children's feelings about the slide sequence characters one may reasonably ask whether the verbal ability of the child confounds the empathic response. The examiner giving the test wrote down all spontaneous verbalization given in response to the standard questions. The total number of words given was used as a measure of verbal ability. This measure of verbal ability correlated positively with empathy for sad feelings ($r=.24$, $p < .10$) angry feelings ($r=.33$, $p < .04$), and modestly with fearful feelings ($r=.19$, n.s.) but showed negligible correlation with empathy for happy feelings ($r=.07$, n.s.). More importantly, when the verbal ability measure was partialled out of the correlation

between empathy for happy feelings and cooperation, the correlation remained positive and statistically significant ($r=.31, p < .05$). The correlation is thus not dependent upon verbal ability alone.

The results of the present study support the view, at least in the case of young children, that it is empathic responses to particular feelings rather than a global empathic response which is useful in predicting social behavior. In particular, it is children's empathic response to others' happiness which follows a different course of development and which relates to social behavior.

The role that positive affective response to others might play in the development of cooperative, or any positive social behavior holds out some intriguing possibilities. It may be that "having a good time" is infectious and attractive to the child who is empathic to pleasant feelings, and such cues lead the child to join in block play, fantasy play or other play which entails highly reciprocal interchange. Greater empathic sensitivity would thus lead to increased proximity and a greater likelihood of social interchange. Once the give and take of interaction has begun, the child may cooperate to increase the other child's pleasure, vicariously his or her own pleasure, or both.

A recent experiment with adults suggests that even when it was distress that the other was experiencing, it was primarily (although not entirely) positive feeling which was experienced in response to their needs and which led to a helping response. Coke, Batson and McDavis (1978) found that adults who listened to a taped newscast of a person in need, and who also had their feelings aroused by viewing false high GSR readings on equipment attached to their arms, offered more help than those who heard the newscast but received false low GSR readings. The

more significant finding with implications for the present study was that those whose affect was highly aroused also rated the quality of their arousal as more "compassionate", "softhearted", "warm", "concerned" and "empathic" than those in the low arousal condition. Since they did not rate their emotions as significantly more "upset", "troubled" or "alarmed", the authors argued that helping behavior is facilitated by an "other-centered, altruistic desire to have the distress of the person in need reduced" and not an "egoistic desire to have this emotional arousal (in themselves) reduced" (p. 763, parentheses mine).

Whether in young children it is possible to determine if it is other's pleasure they are motivated to increase, or their own by cooperating, will not be easy to determine, but it may be possible to at least isolate the role of empathy for positive affect and positive affect itself in cooperative interchanges. Event sampling cooperative interactions with attention to facial and body cues may be helpful in this regard. Sawin (Reference Note 1) has recently found that direct ratings of facial and vocal signs of empathic arousal were good predictors of altruistic behavior.

One last point to be made about the specificity of empathic responses has to do with the physiological mechanisms governing emotions. It is interesting to note that happy or pleasurable responses are governed by the parasympathetic nervous system whereas unpleasant emotional responses such as anger and fear are governed by the sympathetic nervous system (Leukel, 1968). The pleasant emotions are accompanied by "widespread but discrete parasympathetic responses which are cholinergic and governed from the anterior and medial hypothalamus" while "rage and fear...

are accompanied by diffuse sympathetic discharge, reinforced by hormones from the adrenal medulla" (epinephrine and norepinephrine) (p. 353). Since the experience of pleasant and unpleasant emotions is different, the vicarious experience of it is likely to parallel such division.

The involvement of emotions, and vicariously experienced emotions in play has historically been of greater interest to the clinician and not the developmental researcher, restricted to questions of maladaptive rather than developmentally appropriate behavior. A strictly cognitive approach to empathy similarly displaces the affective motivators of prosocial interaction. A perspective which encompasses cognitive as well as affective mediational processes may ultimately explain with greater comprehensiveness the development of prosocial behavior.

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